



Empirical Differences between UAE and Finland of Strategic Foresight Implementation

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Abstract: Strategic foresight is a structured and systematic way of using ideas to anticipate and better prepare for change in the future. Therefore, the main aim of the study is to ascertain whether there is difference between UAE and Finland strategic foresights implementation. This study employed quantitative methodology where questionnaire was used as a means for data collection. The data was analysed using SPSS software to ascertain the difference between the means across the strategic foresight dimensions between the two countries. The result findings revealed that there is statistically significant difference between UAE and Finland's in the areas of Information use and method sophistication of the two countries' strategic foresights. Specifically, UAE and Finland differs on information use in their strategic foresights. Similarly, the two countries differ on method sophistication in their strategic foresight. However, there is no significant difference between UAE and Finland on people and network, organisation and culture in their strategic foresights. This specify that the respondents from Finland and UAE had agreed almost similar factors in strategic foresight for the public policy making. Hence if taking Finland as a benchmark, the results indicate that UAE is also having the same interest in strategic foresight implementation.

Keywords: Strategic Foresight, public policy, UAE and Finland

1. Introduction

UAE faces many challenges at various levels including political, economic and social agenda. At the political level, there are rapid regional changes in addition to the war on terror, at the economic level, there is a drop-in oil prices and increased competition to attract foreign investment, at the social level, there are demographic changes at the population level and an increase in the number of foreign residents from different cultures. These accelerating challenges are putting pressure on the policy maker because these politicians must take into account what may happen in the near and distant future, which imposes on the policy maker the need to foresight the future not only for long-term decisions but also for the short-term decisions. This is because foresight is a participative approach to creating shared long-term visions to inform short-term decision-making processes (Kuosa, T., 2016, and Birkland, T. A., 2014). Foresight can be defined as "the application of systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building

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processes to informing present-day decisions and mobilising joint actions." It brings together key agents of change and various sources of knowledge in order to develop strategic visions (Miles & Keenan, 2002, p. XI). According (Agentielle, 2013), foresight has some common features, including long-term orientation, examination of a wide range of factors, drawing on widely-distributed knowledge, institutionalization, and creation of and the use of formal techniques or methods.

Strategic foresight is defined as the ability to generate and sustain a forward view that can be used to provide insight which will be beneficial to organizations (Slaughter, R. A., 1997). Strategic foresight is a systematic approach to looking beyond current expectations and taking into consideration the likely future developments with a view to identifying implications for policies today (OECD, 2019). With strategic foresight, the planner utilises scanned input, calculated predictions, alternate future possibilities, and provided feedbacks to prepare or modify plans for the organizations and presenting strategic plans with indicators to assess future plans (implications process) (Gavetti, G., & Menon, A. 2016). Although analysis is a part of strategic planning, foresight is not always put into consideration when plans are being developed or actions are taken. It is important to consider possible outcomes and probable futures in the development of preferred future plans as alternative futures. Strategic foresight professionals are tasked with the duty of ensuring diverse and relevant data, forecasts, and possibilities that are considered during the decision-making, planning, and analysis process. This is done so the plans can be adequately communicated, and to make certain that appropriate feedback and the proposed action are received after the plans have been undertaken which results in enhancing the foresight process and realizing the preferred plans of the favourable future (Rohrbeck, R., Battistella, C., & Huizingh, E., 2015). The recognition of strategic foresight as a global trend led to its practice in private, governmental, and non-governmental organizations, and it is practised at various levels (personal, organizational, and social). Strategic foresight applies the storytelling abilities for the purpose of engaging tacit knowledge, forging shared understanding, making clear assumptions, and making plans for the future (Wilkinson, A., 2017).

The terms public policy is used to refer "a set of actions by the government that includes, but is not limited to, making laws and is defined in terms of a common goal or purpose" (Cochran et al., 2006, p. 1). Making public policy is not an easy task as it involves many aspects, including public opinion, media attitudes, ideas of experts, active citizens, business and labour leaders and others. (Cochran et al., 2006). In this study, Finland is selected as a reference case to study the impact of strategic foresight on public policy making in UAE government ministries, because of the important similarity between the two countries. Both small in size and population compared to their regional surroundings, but both are distinguished from it by the high level of education and the advanced technological structure, which make both face the same challenges and have the same financial and technological opportunities to implement strategic foresight. Hence, this study was intended to identify the differences between the UAE and Finland strategic foresight contributing factors.

2. Literature Review

Forecasting is about predicting the development of a known trend or issue however strategic foresight is about identifying new emerging issues for which often no past data is available and therefore forecasting would not be possible (Krystek, M., & Anton, M., 2007). (Rohrbeck, R., & Gemünden, H. G., 2008) used five dimensions of strategic foresight which are Information Usage, Method Sophistication, People & Networks, Organization and Culture. With these dimensions it will enable organisation to plan enhancements that it will pave the way to an increase in implementation of successful strategic foresight systems. It creates multiple paths to the enhancement of strategic foresight proficiency. This allows organisation to choose the own strategy for advancing strategic foresight practices. The five dimensions are as follows;

- **Information Usage dimension**

Is the capability of company/organisation to sense and act upon weak signals in order to change environment. It depends on information sources such as supplier contacts for technology foresight or press clippings for competitor foresight.

- **Method sophistication dimension**

It is the method used to extract meaning from data/source of information which can provide a competitive advantage. With vast amounts of data which include patent and publication databases are frequently used to extract information on emerging technologies, technological convergence or technology strategies of competitors for foresighting process.

- **People & Networks dimension**

Large company/organisation has the knowledge about disruption in the system and foresight is only about smartly channelling the knowledge which is already available.

- **Organization dimension**

In organisation, the foresight element is innovation management of the organisation where it is expected to integrate with other processes to be more extensive in order to use the full potential of the future insights.

- **Culture dimension**

Culture of unwillingness to share across functions is often the most important obstacle for dissemination of Strategic Foresight insights. Hence the cultural dimension should work on creating trust and motivating ongoing information sharing on multiple levels.

There are many factors in each of the five strategic foresight dimensions and this study has identified through literature review these factors as in Table 1.

Table 1 - Factors in each of the dimensions

Strategic foresight dimension	Code	Contributing Factors	References
Information Usage	IU1	Scanning the technological environment	<ul style="list-style-type: none"> • Porter et al., 2004 • Rohrbeck, R., & Gemünden, H. G., 2008 • Gornick, et al., 1998 • Becker, H. S. (Ed.). (2002) • Raford, N. (2015) • Singh, et al., 2020 • Wolff, 1992; • Yasai-Ardekani and Nystrom, 1996; • Daheim and Uerz, 2006; • Schwarz, 2008 • Jain, 1984 • Reger, 2006; • Katz & Allen, 1982;
	IU2	Scanning the economic environment.	
	IU3	Scanning the political environment	
	IU4	Scanning the socio-cultural environment	
	IU5	Scanning long term, medium and short term	
	IU6	Scanning restricted or exclusive sources.	
Method Sophistication	MS1	Advance method to solve specific problem	
	MS2	Advance methods to support internal communication	
	MS3	Advance methods to support external communication	
	MS4	Advance methods to integrate market and technology	
People and Networks	PN1	Foresight in establishment a broad knowledge	
	PN2	Foresight in having a strong internal network	
	PN3	Foresight in having a strong external network	
	PN4	Foresight insights throughout government organisations	
Organization	OG1	Strategic Foresight activities which are issue driven	
	OG2	Strategic Foresight activities which are in place	
	OG3	Strategic Foresight to trigger bottom-up	
	OG4	Strategic Foresight to trigger top-down	
	OG5	Incentives in place that reward scanning for change	
	OG6	Employee responsible for detecting weak signals	
Culture	CT1	Encourages networking with other institutions	
	CT2	Information shared freely across departments	
	CT3	Basic assumptions are openly and regularly challenged	
	CT3	Suggestions are welcomed and adopted	
	CT4	Everyone responsibility for the organisation	

There are various governmental approaches to organizing foresight mentioned by (Dreyer & Stang ,2013), that said the rich countries in North America, Europe and Asia are more likely to pursue foresight to understand an uncertain future, and first separate foresight analysis from potential policy implications. The completed output of the forecast process can be used to inform the policy plan. Many programs involving policy planners and decision-makers carrying out the visionary work to ensure that the output of the program is relevant to this audience and in the foresight and policy enforcement phases the separation is not always clear. However, the core value of these programs is the goal of not assuming the results of a visionary effort. The model of separating foresight and policy response is not very common in developing and emerging economies such as in India, Indonesia, China, Brazil, and South Africa which produces more short term that created according to government goals. The degree of centralization in government foresight programs varies widely from country to country which explains the different foresight approaches and methodologies. "Countries that make concerted efforts to prioritize foresight efforts within their governments (UK, Singapore, France, and the Netherlands) often lead government efforts and respond to requests from central policy agencies. However, central offices are often important both for the support of top decision-makers and foresight training and development of other departments across the government.

Another country group has a decentralized model (Finland, Germany, USA, Italy, and Switzerland) and the government sector generally acts independently if it chooses to make a foresight. In some countries with central planning agencies (India, Mexico, South Africa), visionary work by external agencies are used to provide information to the government planning process. In India, for example, departments defined and contracted directly with external think tanks to produce foresight reports on the Asian security environment. The EU also uses external consultants to carry out much of the foresight work for their plans and innovation aspects. Other countries, including Norway, Japan, South Korea, and Russia, use independent research institutions in collaboration with the government rather than external

consultants. The Norwegian public policy plans and foresight has historically been led within the Norwegian Research Council. While in South Korea and Japan, they have special laboratories for scientific and technological research.

3. Methodology

This research is a comparison between UAE and Finland strategic foresight and the process of public policy making (Simon, H.A. 1997). The study employed a quantitative research methodology with the use of questionnaires as a means for data collection among the management staff of government organizations in the UAE. A total of 500 questionnaire were distributed and 397 (79.4%) valid responses were collected and analysed descriptively by using the mean score, standard deviation and t-test for each factor in the strategic foresight dimensions. The main respondents are the management staffs of government organizations in UAE and Finland that play an important role in strategic foresight implementations. The data collected were analysed using the Statistical Package for the Social Sciences (SPSS). Prior to the main data analyses, preliminary data screening and transformation which involved, missing value analysis, descriptive statistics and normality test of the data were conducted in order to ensure that the data meets the requirements for further analysis (Parsons, W. ,1995 and Simon H. A. ,1947).

4. Findings

The main objective of the research is to examine the similarities between UAE and Finland in the implementation of strategic foresights. There are five dimensions in the strategic foresight which are Information Use (IU); Method Sophistication (MS); People and Network (PN); Organisation (OG) and Culture (CT). Data collected from the survey was analysed the mean and standard deviation score for each of the strategic foresight factors of UAE and Finland respondents' opinions as in Table 2.

Table 2 - Difference between UAE and Finland strategic foresights dimensions

Strategic foresight dimensions	No. of factors	Country of Residence	N	Mean	Difference of Means	Rank
Information Use (IU)	6	UAE	198	4.800	0.423	5
		Finland	199	4.377		
Method Sophistication (MS)	4	UAE	198	5.003	0.326	4
		Finland	199	4.677		
People and Network (PN)	4	UAE	198	4.033	0.245	3
		Finland	199	3.788		
Organisation (OG)	6	UAE	198	4.684	0.044	1
		Finland	199	4.640		
Culture (CT)	5	UAE	198	4.040	0.235	2
		Finland	199	3.805		

From Table 2 indicates the small differences between UAE and Finland in strategic foresight dimensions for policy making from the perspective of the respondents. *Organisation* dimension was ranked number 1 meaning that it attained the smallest difference between the two countries. The following dimension is the *culture*, then followed by *people and network* then *method sophistication* and finally *information use*. However to test whether the differences between the means across the strategic foresight dimensions between the two countries, a t-test was conducted and the results are as Table 3.

Table 3 - Independent Samples Test

Strategic foresight dimensions	t-test for Equality of Means					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Information Use	2.323	395	.021	.42278	.18196	.06505	.78051
Method Sophistication	2.313	395	.021	.32539	.14068	.04882	.60196
People and Network	1.705	395	.089	.24514	.14382	-.03761	.52789
Organisation	.343	395	.732	.04448	.12966	-.21043	.29938
Culture	1.691	395	.092	.23538	.13917	-.03823	.50899

The result in table 3 indicates that there is statistically significant difference between UAE and Finland's in the areas of *information use* and *method sophistication* of the two countries' strategic foresights. Specifically, UAE and Finland

differ on *information use* in their strategic foresights ($t=2.323$, $df=395$, $p=.021$). Similarly, the two countries differ on *method sophistication* in their strategic foresight ($t=2.313$, $df=395$, $p=.021$). However, there is no significant difference between UAE and Finland on *people and network*, *organisation* and *culture* in their strategic foresights. This specifies that the respondents from Finland and UAE had agreed almost similar factors in strategic foresight for the public policy making. Hence if taking Finland as a benchmark, the results indicate that UAE is also having the same interest in strategic foresight implementation.

5. Conclusion

The main aim of the study is to ascertain whether there is difference between UAE and Finland strategic foresights. To achieve this, a t-test was conducted whether there is difference between the means across the strategic foresight dimensions between the two countries. The result shows that there is statistically significant difference between UAE and Finland's in the areas of Information use and method sophistication of the two countries' strategic foresights. Specifically, UAE and Finland differ on information use in their strategic foresights. Similarly, the two countries differ on method sophistication in their strategic foresight. However, there is no significant difference between UAE and Finland on people and network, organisation and culture in their strategic foresights. The findings from this work may serve as a catalyst on future strategic foresight study especially for the gulf countries.

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